

PATENT
09/994,440
Docket 091/010c

CLAIM AMENDMENTS

1. *(Currently amended)* A method for obtaining a population of differentiated cells, comprising:
 - a) isolating cells from the inner cell mass of a human blastocyst;
 - b) forming colonies comprising undifferentiated cells from the isolated blastocyst cells;
 - c) passaging cells from the colonies into onto an extracellular matrix in a culture environment that is essentially free of feeder cells;
 - d) culturing the passaged cells in the culture environment that is essentially free of feeder cells; and
 - e) differentiating the cultured cells into a population comprising lineage restricted cells or terminally differentiated cells.
2. *(Currently amended)* The method of claim 1, wherein the cells are differentiated by ~~withdrawing serum, serum replacement, or a growth factor from the growth environment~~ culturing the cells in the absence of serum or serum replacement.
3. *(Original)* The method of claim 1, wherein the cells are differentiated by adding retinoic acid, butyrate, DMSO, or a growth factor to the growth environment.
4. *(Original)* The method of claim 1, wherein the cells are differentiated by culturing on a solid surface that promotes differentiation.
5. *(Original)* The method of claim 1, wherein the cells are differentiated through the formation of embryoid bodies.
6. *(Original)* The method of claim 1, wherein the cells are differentiated without forming embryoid bodies.
7. *(Original)* The method of claim 1, wherein the cells are differentiated into neural precursor cells.
8. *(Original)* The method of claim 1, wherein the cells are differentiated into neuronal cells or glial cells.
9. *(Original)* The method of claim 1, wherein the cells are differentiated into fibroblasts.
10. *(Original)* The method of claim 1, wherein the cells are differentiated into hepatocytes.

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11. *(Original)* The method of claim 1, wherein the population obtained is at least ~80% lineage restricted cells or terminally differentiated cells.
12. *(Original)* The method of claim 7, wherein the population obtained is at least ~50% neural cells.
13. *(Original)* The method of claim 8, wherein the population obtained is at least ~50% neuronal cells.
14. *(Original)* The method of claim 9, wherein the population obtained is at least ~50% fibroblasts.
15. *(Original)* The method of claim 10, wherein the population obtained is at least ~50% hepatocytes.